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| Minutes | LOBI R&D  2023-02-02 |
| Present: | L. Crescimbeni, T. Sieber, P. Niedermayer, J. Yang, C.Cortés, P. Forck, S. Klaproth |
| Copies to: | P. Boutachkov, P. Forck, D. Haider, A. Reiter, M. Saifulin, T. Sieber, R. Singh, F. Ucar, S. Udrea, B. Walasek-Höhne, M. Witthaus, L. Crescimbeni, J. Yang, P. Niedermayer, S. Klaproth |
| Web-Link: | <https://www-bd.gsi.de/dokuwiki/doku.php?id=fair-rnd:weekly-meeting:overview> |

## Hybrid meeting via Zoom (https://gsi-fair.zoom.us/j/96329605990, pwd: 138689) and Diskussionsraum IT/EE (SB2.2.239b)

## General Remarks and Reports

* IBIC 2023: PF is asking for suggestions for conference (organization, invited talk).
* Mail: Home office is allowed just one day per week
* Group Seminar: PF would like to suggest PN (modern beam excitation hardware), SK/RS (transition radiation for low beta beams).
* Invitation for informal (Zoom) meeting of accelerators/beam-diagnostics teams with industry. Organized by ESS. PF will share more information when available.
* FAIR – restructuring of antiproton-related projects: Serban U. will rejoin our group. The date has to be finalized. Main work related on longitudinal measurement, not finalized yet.
* CBAC cosy meeting on beamtime: PN on the 23rd of february will have a talk to expose to the committee his work so they can decide on the amount of the beamtime that will be given to his project. The talk will be held from GSI but has to be followed remotely.
* Points from Team Leader meeting:
* New person in BMBF responsible of FAIR
* Discussion ongoing on the 800 million missing for FAIR
* Fair council 9-10th march, the stepwise realization of fair will be discussed and maybe finalized, also decision on budget
* 1st level workshop 26-27th January on project as P-Linac: discussion on how to use the stored material for P-Linac, it seems clear that the project is now frozen completely.
* Budget for new personnel has expired, 30 position has been eliminated from GSI, 2 also of our group (usually people going to retire and the position will not be replaced)
* Sick leave is now electronically, send digitally from the Doctor to GSI, still you need to inform the office at GSI for Sick leave
* March: update on status of construction site and a planning of next steps
* BEA budget is 40% lower than usual, big item should be shifted to next year if possible, when maybe the budget emergency is solved

## Projects

* **E-lens**
  + Was shown that it works nicely with hollow electron beam and with different gases.
* **pLINAC (TS, PF, SU)**
  + Look for different applications of already prepared hardware (BPM for cw-LINAC, Libera hardware for UNILAC)
  + **SEM grids**: The grids are planned to arrive in March.
  + **BSM:** Coordination (about repair) with Jülich ongoing.
  + FC: Fermilab has received the contract and start the production of the boxes.
* **CCC (LC, DH)**
* Seems like helium is available again. Next week cool-down
* Drawings of shield for thermal shield: DH prepared basic 2D drawings. Drawings of interfaces (flanges, etc.) are prepared by Markus Geißler/Christoph Dorn.
* Ordering of components of the thermal copper shield has started. The goal is to have all the material in the workshop by the end of March. Still realistic. Threshold is the GSI Acquisition office.
* First version of FESA has been tested, Harald is still working on the next step. PC with the ADC is temporarily installed in the TH for testing FESA
* Meeting with CERN expert of FESA has still to be defined
* **ZnO scintillators (MS):** 
  + No news
* **Slow extraction (JY):**
  + Simulation of transit time distribution: received suggestions on meeting with RS and PN, received data from old experiment
  + Will do exact comparison of simulation results between x-suit and madx.
* **Tune and excitation (PN, RS,CC):**
  + Submitted application for COSY beam-time (test of newer version of signal generator and macro-spill feedback system). Will be end of the year (probably September-October). Committee to approve on Feb 23th. Talk with the committee
  + Simulation of results of BTF data collected at HIT to understand the phenomena is ongoing. Meeting with CERN (Elena) planned for next week.
  + Simulation with different waveforms gives out different shape for the spill.
  + Collaboration between CERN and GSI: meet yesterday for discussing simulation results of BTS obtained by CC. Studied how this results is correlated with the result of PN simulation.
  + Ordering of GPU still needs to be resolved.
* **GTR and optical transition radiation (OTR) (RS):**
  + IPAC paper in preparation
  + 3D printing test for model of OTR detector
* **Absolute intensity measurement with pick-ups (RS, SK):**
  + Simulation of high-impedance (rather than 50 Ohm) for charge measurement close to be done
  + IPAC contribution ongoing.
* **Fast Faraday-Cup (FFC) (RS, SK):**
  + Meeting with 3D printing company successful (SK): First prototype of cup made by them planned this month.
  + Fermilab has started producing Faraday Cups for us. Contract/order has reached them.
  + Kick-off meeting for longitudinal phase space measurement (with Liverpool) in UNILAC with FFC
* **Charge Amplifier for BPM (RS, TR, SK):**
  + Prepare export/import script for python for simulated CST-data.
  + Measurement of amplifiers performed: final results were distributed
  + CERN amplifier is 15 times more sensitive than the normal one, the amplifier is now under test again for stability (Wolfgang and Christoph Krüger), mid of February will be sent back to CERN

## Meeting, Workshops, Conferences

* + 2nd FAIR shareholder meeting (mid of February): decision on FAIR project planning
  + Cosy beamtime advisory committee (CBAC), GSI/online (23, 24th February): decision on beamtime
  + Ifast (WP: slow extraction), Trieste (19th – 21st April): RS, potentially others who are intersted
  + IPAC, Venice (May 2023): LC (CCC), PN, PF, TS (pLINAC), JY (applied for student grant), SK
  + MT meeting, Dresden (July 2023): LC (CCC)
  + IBIC, Saskatoon (September 2023): LC/TS (CCC), no deadline yet
  + Kyocera meeting with Ceramic Experts: 24th or 23rd February

## Experimental Areas

**UNILAC:** nothing planned for now

**X2:** nothing planned for now

**Messstation:** works on cables and several other activities

**cw-linac**: nothing planned

**SIS:** nothing planned for now

**HTP:** nothing planned

**Testing-Halle**: CCC ready for cooldown, move BSM to cafeteria (one rack left)

**Studilab:** nothing new

**COSY:** PN, RS: plan a beam time at COSY

**HIT:** nothing planned for now

## Personal topics

* Travel reimbursement: money was transferred in the beginning of January
* Student in Liverpool will start March 1st.
* March 1st: Leonie Bauer (MSc student) will start a project on camera

## Beamtime planning / report

No beam-time until second half of next year (August 2023)

**Next Meeting:** Thursday, 10am as in-person meeting